THURSDAY, JANUARY 27, 1881

UNCONSCIOUS MEMORY

Unconscious Memory, &-c. By Samuel Butler. Op. 5. (London: David Bogue, 1880.)

M. BUTLER is already known to the public as the author of two or three books which display a certain amount of literary ability. So long therefore as he aimed only at entertaining his readers by such works as "Erewhon," or "Life and Habit," he was acting in a suitable sphere. But of late his ambition seems to have prompted him to other labours; for in his "Evolution, Old and New," as well as in the work we are about to consider, he formally enters the arena of philosophical discussion. To this arena, however, he is in no way adapted, either by mental stature or mental equipment; and therefore makes so sorry an exhibition that Mr. Darwin may well be glad that his enemy has written a book. But while we may smile at the vanity which has induced so incapable and ill-informed a man gravely to pose before the world as a philosopher, we should not on this account have deemed "Unconscious Memory" worth reviewing. On the contrary, as a hasty glance would have been sufficient to show that the book is bad in philosophy, bad in judgment, bad in taste, and, in fact, that the only good thing in it is the writer's own opinion of himself-with all that was bad we should not have troubled ourselves, and that which was good we should not have inflicted on our readers. The case, however, is changed when we meet, as we do, with a vile and abusive attack upon the personal character of a man in the position of Mr. Darwin; for however preposterous, and indeed ridiculous, the charges may be, the petty malice which appears to underlie them deserves to be duly repudiated. We shall therefore do our duty in this respect, and at the same time take the opportunity of pointing out the nonsense that Mr. Butler has been writing, both about the philosophy of evolution and the history of biological thought.

The great theory which Mr. Butler has propounded, and which with characteristic modesty he says seems to himself "one, the importance of which is hardly inferior to that of the theory of evolution itself"—this epochmaking theory is as follows. The processes of embryonic development and instinctive actions are merely "repetitions of the same kind of action by the same individuals in successive generations." Therefore animals know, as it were, how to pass through their embryonic stages, and, after birth, are taught by instinctive knowledge, simply because as parts of their ancestral organisms they have done the same things many times before; there is thus a race-memory as there is an individual memory, and the expression of the former constitutes the phenomena of heredity.

Now this view, in which Mr. Butler was anticipated by Prof. Hering, is interesting if advanced merely as an illustration; but to imagine that it reveals any truth of profound significance, or that it can possibly be fraught with any benefit to science, is simply absurd. The most cursory thought is enough to show that, whether we call heredity unconscious memory, or memory of past states

of consciousness the hereditary offspring of those states, we have added nothing to our previous knowledge either of heredity or of memory. All that lends any sense to the analogy we perfectly well knew before-namely, that in the race, as in the individual, certain alterations of structure (whether in the brain or elsewhere) when once made, tend to remain. But the analogy throws no light at all upon the only point which requires illumination - namely, how is it that, in the case of heredity, alterations of structure can be carried over from one individual to another by means of the sexual elements. We can understand in some measure how an alteration of brain structure, when once made, should be permanent, and we believe that in this fact we have the physical basis of memory; but we cannot understand how this alteration is transmitted to progeny through structures so unlike the brain as are the products of the generative glands. And we merely stultify ourselves if we suppose that the problem is brought any nearer to a solution by asserting that a future individual while still in the germ has already participated, say in the cerebral alterations of its parent-and this in a manner analogous to that in which the brain of the parent is structurally altered by the effects of individual experience. But Mr. Butler goes even further than this, and extends his so-called theory even to inorganic matter. He "would recommend the reader to see every atom of the universe as living, and able to feel and remember, though in a humble way." Indeed he "can conceive of no matter which is not able to remember a little"; and he does "not see how action of any kind is conceivable without the supposition that every atom retains a memory of certain antecedents." It is hard to be patient with such hypertrophied absurdity; but if the bubble deserves pricking, it is enough to ask how it is "conceivable" that an "atom," even if forming part of a living brain, could possibly have "a memory of certain antecedents," when, as an atom, it cannot be conceived capable of undergoing any structural modification.

So much for Mr. Butler's main theory. But he has also a great deal to say on the philosophy of evolution. "Op. 4" was called "Evolution, Old and New," and now "Op. 5" continues the strain that was struck in the earlier composition. This consists for the most part in a strangely silly notion that "the public generally"-including, of course, the world of science—was as ignorant of the writings of Buffon, Dr. Erasmus Darwin, and Lamarck as was Mr. Butler when he first read the "Origin of Species." That is to say, "Buffon we knew by name, but he sounded too like 'buffoon' for any good to come from him. We had heard also of Lamarck, and held him to be a kind of French Lord Monboddo; but we knew nothing of his doctrine. . . . Dr. Erasmus Darwin we believed to be a forgotten minor poet," &c. No wonder, therefore, when such was our manner of regarding these men, that we required a Mr. Samuel Butler to show us our error. And no wonder that Mr. Charles Darwin, who doubtless may have peeped into the literature which Mr. Butler has discovered, should so well have succeeded in his life-long purpose of concealing from the eyes of all men how much he owes to his predecessors. No wonder, also, that Mr. Darwin, when he chanced to see an advertisement of a forthcoming work by Mr. Butler with the title "Evolution,

Old and New," should have inferred, as Mr. Butler observes, "what I was about," and forthwith began to tremble in dismay that at last the Buffoon, the French Lord Monboddo, and the forgotten minor poet had found a champion to vindicate their claims. For now the hideous corruption of the monster was about to be exposed who had fed as a parasite upon these "dead men," till he stands before our eyes bloated with honours undeserved, and extending "his power of fascination all over Europe," not only "among the illiterate masses but among experts and those most capable of judging." No wonder then that Mr. Darwin, knowing that at last a wise young judge had come to judgment and to open the eyes of the "experts," should at once have set about a book on his own grandfather to disarm by anticipation the justice of the avenger. But natural as all this unquestionably appears, it scarcely prepares us, as it did not prepare Mr. Butler, for the depths of deceit and depravity to which Mr. Darwin would "condescend" in order to thwart the arm of justice. Yet the fact is that Mr. Darwin entered into a foul conspiracy with Dr. Krause, the editor of Kosmos, to slay by infamous means the righteous but damning work of Mr. Butler. "The steps," as he points out, "are perfectly clear." A whole number of Kosmos was devoted to Mr. Darwin and his antecedents in literature, at about the time when "Evolution Old and New" was "announced" as in preparation. Soon afterwards arrangements were made for a translation of Dr. Krause's essay, and were completed by the end of April, 1879. Then "Evolution Old and New" came out, was read by Dr. Krause, who modified a passage or two in a manner that "he thought would best meet 'Evolution Old and New,' and then fell to condemning that book in a finale that was meant to be crushing." So far all was fair enough; but now comes the foul play. "Nothing was said about the revision which Dr. Krause's work had undergone, but it was expressly and particularly declared in the preface that the English translation was an accurate version of what appeared in the February number of Kosmos, and no less expressly and particularly stated that my book ["Evolution Old and New"] was published subsequently to this. Both these statements are untrue," &c. Having discovered this erroneous conspiracy, Mr. Butler wrote to Mr. Darwin for an explanation. With almost incredible complacency this arch-hypocrite had the hardihood to answer that it "is so common a practice" to modify articles in translation or republication, that "it never occurred to him to state that the article had been modified," but that now he would do so should there be a reprint. This, as Mr. Butler says, "was going far beyond what was permissible in honourable warfare, and it was time in the interests of literary and scientific morality . . . to appeal to public opinion." He therefore communicated the facts to the Athenaum, expecting as a consequence to raise a "raging controversy." Strange to say, however, the thing fell flat. "Not only did Mr. Darwin remain perfectly quiet, but all reviewers and littérateurs remained perfectly quiet also. It seemed . . . as if public opinion rather approved of what Mr. Darwin had done." Nevertheless Mr. Butler had a salve to his disappointment in that he saw "the 'Life of Erasmus Darwin' more frequently and

more prominently advertised than hitherto," and "presently saw Prof. Huxley hastening to the rescue with his lecture 'On the Coming of Age of the Origin of Species.'" Truly, therefore, in some, if not quite in full measure, Mr. Butler's "vanity," as he himself observes, "was well fed by the whole transaction"; for he saw by it that Mr. Darwin "did not meet my work openly," and therefore that Prof. Huxley had to "hasten to the rescue" with a Royal Institution lecture. How sweet it doubtless was, if Mr. Butler attended that lecture, to think what a large proportion of the audience must have seen through the whole plot! Enough, surely, to "feed" any ordinary "vanity." But Mr. Butler's vanity is inordinate, and so requires a more than ordinary amount of nourishment. He therefore felt it desirable to give a detailed exposition of the whole affair, and this we have in some charmingly temperate and judicious chapters of "Op. 5."

But to be serious. If in charity we could deem Mr. Butler a lunatic, we should not be unprepared for any aberration of common-sense that he might display. His "Op. 5," however, affords ample evidence that he is not a lunatic, but a man who wants to make a mark somewhere, and whose common sense, if he ever had such a thing, has been completely blinded by self-conceit. To us, no less than to him, "the steps are perfectly clear." certain nobody writes a book accusing the most illustrious man in his generation of burying the claims of certain illustrious predecessors out of the sight of all men. In the hope of gaining some notoriety by deserving and perhaps receiving a contemptuous refutation from the eminent man in question, he publishes this book, which, if it deserved serious consideration, would be not more of an insult to the particular man of science whom it accuses of conscious and wholesale plagiarism, than it would be to men of science in general for requiring such elementary instruction on some of the most famous literature in science from an upstart ignoramus who, until two or three years ago, "considered" himself "a painter by profession." The eminent man however did not administer the chastisement: hence these tears of rage and chagrin; hence too the morbid fancying of the great man's discomfort-of the rallying round of his friends, Krause's article, Huxley's lecture, &c., till such an explosive state of feeling was fermented that a mere omission to supply a reference to a book was magnified into a dark conspiracy-notwithstanding that a moment's thought might have shown how such a conspiracy, even if attempted, would not have been worthy of imbeciles.

But, in conclusion, let us ask what this work on "Evolution, Old and New" contained to produce, as its author imagines, such a scare among the leading "experts" in science. The work has already been reviewed in these columns (June 12, 1879) by Mr. Wallace, who, while fully exposing its weakness, treats the author with more consideration than he deserves—doubtless because Mr. Wallace is himself so personally associated with the theory of "natural selection." It is therefore sufficient for us here to say that "Evolution, Old and New," conveys a confession on the part of its author that until two or three years ago he was totally ignorant concerning the history of biological thought. His attention having at length been directed to the fact that some of

the best naturalists had speculated on the probability of evolution, he for the first time found, as he innocently enough observes, that evolution and natural selection are not quite the same thing. Having made this highly original discovery, he forthwith proceeds to display a feebleness of judgment even more lamentable than his previous ignorance. For he concludes that the older speculations on the causes of evolution are more satisfactory than those advanced by Mr. Darwin. columns of a scientific journal any comment on such a conclusion might well be deemed superfluous, although Mr. Wallace, in his review above mentioned, had the courtesy to expose its folly. The older evolutionists deserve indeed all honour for having perceived early in the day that some theory of descent must be true, even though they were not able to find the theory that could be seen to be in any measure satisfactory. But a man who in the full light of Darwin's theory can deliberately return to "the weak and beggarly elements" of Lamarck-such a man only shows that in judgment he is still a child. The extreme weakness of Mr. Butler's argumentation has, as we have said, already been shown by Mr. Wallace; but it is of more interest to ask what infatuation it can have been that led him to suppose "all Europe and those most capable of judging" required him as an author to make himself ridiculous as an expounder of this subject. The answer is not far to seek. As Mr. Butler himself has told us, he has vanity, and his vanity is not less childish than his judgment. Thus, to give only one illustration. Of so much importance does he deem his own cogitations, that in the book we are reviewing he devotes two chapters, or more than thirty pages, to "How I wrote 'Life and Habit,' " and "How I wrote Evolution, Old and New"; entering into a minute history of the whole course of his speculative flounderings. This is the only part of the book that repays perusal; but that this part well repays perusal may be judged from the following, which we present as a sample :-

"The first passage in 'Life and Habit' which I can date with certainty is one on p. 52, which ran as follows: . . . "Do this, this, this, which we too have done, and found our profit in it," cry the souls of his forefathers within him. Faint are the far ones, coming and going as the sound of bells wafted on to a high mountain; loud and clear are the near ones, urgent as an alarm of fire.' This was written a few days after my arrival in Canada, June 1874. I was on Montreal Mountain for the first time, and was struck with its extreme beauty. . . . Sitting down for a while, I began making notes for 'Life and Habit,' of which I was then continually thinking, and had written the first few lines of the above, when the bells of Nôtre Dame in Montreal began to ring, and their sound was carried to and fro in a remarkably beautiful manner. I took advantage of the incident to insert then and there the last lines of the piece just quoted. I kept the whole passage with hardly any alteration, and am thus able to date it accurately. . . . Early in 1876 I began putting these notes into more coherent form. I did this in thirty pages of closely-written matter, of which a pressed copy remains in my commonplace-book. I find two dates among them-the first 'Sunday, February 6, 1876"; and the second, at the end of the notes, 'February 12, 1876.'"

This historical sketch, which is without the smallest interest to any one but Mr. Butler himself, winds up with the following burst of eloquence:—

"Here, then, I take leave of this matter for the present.

If it appears that I have used language such as is rarely seen in controversy, let the reader remember that the occasion is, so far as I know, unparalleled for the cynicism and audacity with which the wrong complained of was committed and persisted in. I trust, however, that, though not indifferent to this, my indignation has been mainly roused, as when I wrote 'Evolution, Old and New,' before Mr. Darwin had given me personal ground of complaint against him, by the wrongs he has inflicted on dead men, on whose behalf I now fight, as I trust that some one—whom I thank by anticipation—may one day fight on mine.'

Mighty champion of the mighty dead! When our children's children shall read in Westminster Abbey the inscription on the tomb of Mr. Samuel Butler, how will it be with a sigh that in their day and generation the world knows nothing of its greatest men! But as it is our misfortune to live before the battle over Mr. Samuel Butler's memory has been fought, we respond to his abounding presumption by recommending him, whatever degree of failure he may have experienced in art, once more to "consider" himself "by profession a painter" —or, if the painters will not have him, to make some third attempt, say among the homeopathists, whose journal alone, so far as we are aware, has received with favour his latest work.

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NEWTON'S BRITISH BIRDS

A History of British Birds. By the late William Yarrell, V.P.L.S., F.Z.S. Fourth Edition, revised by Alfred Newton, M.A., F.R.S. Part 10, November, 1876; 11, September, 1877; 12, October, 1878; 13, June, 1880. (London: Van Voorst.)

WE call this work advisedly "Newton's British Birds," although the title-page would seem to signify that it is only a fourth edition of Yarrell's well-known "History." It is however in fact a new book. The text has been completely rewritten, and the familiar woodcuts and vignettes alone remain to remind one of the former author.

The parts of Prof. Newton's work now before us conclude the account of the Passeres and contain the commencement of the history of the British Picariæ. need hardly say that the article upon each species is worked out in the same careful and accurate way as in the former portion of this work. Prof. Newton, as every ornithologist knows, is our leading authority on this subject, which, during a course of many years of constan attention, he has made specially his own. We observe with great pleasure the elaborate manner in which the distribution of each species is described, not only within the area of the British Islands, but also wherever it is known to occur on other parts of the world's surface. We may likewise notice the entire absence of misprints and the excellence of the type and paper, which do credit alike to the author and publisher, and will no doubt greatly contribute to extend the circulation of the work. Having said thus much, it is with regret that we must add one word of discontent, for which we trust Mr. Van Voorst and Prof. Newton will alike forgive us. The rate of issue of the numbers is so slow that it is difficult to calculate when the new edition will be completed. As will be seen by the heading of the article, only four parts